

SON-1532
(80001-1532)

Application No.: 09/283,233

REMARKS

This communication is a full and timely response to the non-final Office Action dated October 22, 2004. By this communication, claims 2 and 12 have been canceled without prejudice or disclaimer of the underlying subject matter. Further, claim 1 has been amended to recite, among other things, the elements of canceled claim 2. Support for the amendment to claim 1 can be found variously throughout the specification and claims. For example, support for the changes to claim 1 can be found in original claim 2. Still further, claim 6 was amended to recite, among other things, an external interface in the housing through which image pickup information is transmitted to the outside. Support for the changes to claim 6 can be found variously throughout the specification. For example, support for the changes to claim 6 can be found at page 16 lines 20-25. In addition, claim 14 has been added. Support for the elements recited in claim 14 can be found variously throughout the specification and the drawings. For example, support for the elements of claim 14 can be found in Figs. 1 and 7 and in the specification at page 7 lines 6-11 and 14-23, page 8 lines 12-18, and page 16 lines 20-25. No new matter has been added. Claims 1, 3-11, 13, and 14 are pending where claims 1, 6, and 14 are independent.

Rejections Under 35 U.S.C. §102

Claims 1, 4, and 5 were rejected under 35 U.S.C. §102(b) as anticipated by *Kenji*, Japanese Patent No. 08070407. Applicants respectfully traverse this rejection. Because claim 2 was canceled and claim 1 was amended to include the elements recited in canceled claim 2, Applicants submit that the rejection of claims 1, 4, and 5 under §102 is moot and should be withdrawn.

Rejections Under 35 U.S.C. §103

Claim 2 was rejected under 35 U.S.C. §103(a) as unpatentable over *Kenji* in view of *Jones*, U.S. Patent No. 5,993,077. Applicants respectfully traverse this rejection. Because claim 2 was canceled and claim 1 was amended to include the elements of canceled claim 2, Applicants will address the rejection of claim 2, with reference to claim 1.

Claim 1 recites an image input device including a mirror body which is designed in a polygonal prism form and formed of mirror faces on the side peripheral surfaces thereof to reflect image pickup light from a subject at a mirror face; and a linear sensor for taking therein the image pickup light reflected from each mirror face of said mirror body and

SON-1532
(80001-1532)

Application No.: 09/283,233

subjecting the image pickup light thus taken to photoelectric conversion, wherein said mirror body is disposed so that the length direction thereof is substantially parallel to the length direction of said linear sensor, and provided so as to be rotatable around the center of a plane which is substantially perpendicular to the length direction of said mirror body; a housing in which said mirror body and said linear sensor are accommodated, and a slender incidence window for passing the image pickup light therethrough into said housing is formed so that the length direction thereof is substantially parallel to the length direction of said mirror body; and support legs which are formed at the formation side of said incidence window of said housing so as to expand from said housing to the outside and support said housing, said support legs being retractably provided in said housing.

Kenji discloses a galvanocamera 1 that includes a linear sensor 1 for sensing light reflected off of a semiconductor 6, through a lens 10, and deflected by a galvanomirror 9. The angle of deflection by the galvanomirror is controlled by a galvanomotor 8. The Office Action acknowledges that *Kenji* fails to disclose, teach, or suggest at least a housing as recited in the claim. Furthermore, the Office Action acknowledges that *Kenji* fails to disclose, teach, or suggest at least support legs as recited in claim 1.

Jones discloses a stand assembly for an optical device. The stand assembly includes a camera 12 mounted through a universal ball mount 20 to a top side of base member 14 and opposite leg members 16. Leg members 16 are telescoping to provide different lengths to stably support the camera 12 on uneven terrain. Foot members 17 of the four leg members 16 define a footprint 18. *Jones* fails to disclose, teach, or suggest, at least the support legs being retractably provided in the housing. In contrast, *Jones* merely teaches that leg members 16 are detachably connected to outer corner leg surfaces.

In sum, each of *Kenji* and *Jones* either singly or combined fail to teach support legs being retractably provided in a housing. At best, the combined references teach an image pickup device having a linear sensor, a mirror to deflect light onto the sensor, and a support member wherein leg members may be detachably attached thereon. Therefore, a *prima facie* case for obviousness has not been established.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys. V. Montefiore Hosp.*, 732 F.2d

SON-1532
(80001-1532)

Application No.: 09/283,233

1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Thus, for at least the reasons discussed above, Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. §103 be withdrawn, and this claim be allowed.

Claims 3-5 depend from claim 1. By virtue of this dependency, Applicant submits that claims 3-5 are allowable for at least the same reasons given above with respect to claim 1. In addition, Applicant submits that claims 3-5 are further distinguished over *Kenji* and *Jones* by the additional elements recited therein, and particularly with respect to each claimed combination. Applicant respectfully requests, therefore, that the rejection of claims 3-5 under 35 U.S.C. §103 be withdrawn, and these claims be allowed.

Claims 6, 8, 9, 12, and 13 were rejected under 35 U.S.C. §103(a) as unpatentable over *Kashitani et al.*, U.S. Patent No. 5,625,183. Applicant respectfully traverses this rejection.

Claim 6 recites An image input device including a housing having a slender incidence window to pass image pickup light from a subject therethrough into said housing; a mirror body which has mirror faces for reflecting the image pickup light from said incidence window and rotatably or swingably provided in said housing; a linear sensor which is disposed in said housing and takes the image pickup light reflected from said mirror body to subject the image pickup light to photoelectric conversion; a plurality of illuminators which are provided in said housing and successively turned on to light up the subject; and an external interface within the housing through which image pickup information is transmitted to the outside.

Kashitani '183 discloses an overhead scanner having a base 1, an upstanding arm 2, a support arm 3, and an optical scanner unit 4 connected to the support arm 3. The optical scanner unit 4 includes a housing 6, a light source 7, a rotatable rectangular mirror 10, an opening 9 to collect light rays from a scanned line, a focusing lens 11, and an image sensor 12. An optical sensor is used to detect when the mirror 10 is rotated. The optical sensor includes, among other things, an A/D converter 53 for converting the output signal of the CCD sensor to a digital signal. Further, a binary converter 54 outputs the digital signal to external utilization circuitry such as personal computers or workstations. *Kashitani '183* fails to disclose, teach, or suggest at least a plurality of illuminators as recited in claim 6. The Office Action alleges that in Figs. 1 and 7 *Kashitani '183* discloses the use of an illuminator. The Office Action also acknowledges the lack of a plurality of illuminators in *Kashitani '183*, but alleges that it would have been an obvious matter of design choice at the time the

SON-1532
(80001-1532)

Application No.: 09/283,233

invention. Applicant disagrees and submits that the component the Office Action alleges is an illuminator, is in fact a photodiode array 35 used in the optical sensor 21 for receiving reflected and diffracted light rays. Therefore, the photodiode array 35 of *Kashitani '183* is not analogous to the plurality of illuminators as recited in claim 6. Moreover, Applicant submits that *Kashitani '183* fails to disclose, teach, or suggest at least an external interface as recited in claim 6.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys. V. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Thus, because *Kashitani '183* fails to disclose, teach, or suggest every element recited in claim 6, Applicant respectfully requests that the rejection of claim 6 under 35 U.S.C. §103 be withdrawn, and this claim be allowed.

Claims 8, 9, and 13 depend from claim 6. By virtue of this dependency, Applicant submits that claims 8, 9, and 13 are allowable for at least the same reasons given above with respect to claim 6. In addition, Applicant submits that claims 8, 9, and 13 are further distinguished over *Kashitani '183* by the additional elements recited therein, and particularly with respect to each claimed combination. Applicant respectfully requests, therefore, that the rejection of claims 8, 9, and 13 under 35 U.S.C. §103 be withdrawn, and these claims be allowed.

Claim 7 was rejected under 35 U.S.C. §103(a) as unpatentable over *Kashitani '183* in view of *Kenji*. Applicants respectfully traverse this rejection.

Claim 7 depends from claim 6. By virtue of this dependency, Applicant submits that claim 7 is allowable for at least the same reasons given above with respect to claim 6. In addition, Applicant submits that claim 7 is further distinguished over *Kashitani '183* and *Kenji* by the additional elements recited therein, and particularly with respect to the claimed combination. Applicant respectfully requests, therefore, that the rejection of claim 7 under 35 U.S.C. §103 be withdrawn, and this claim be allowed.

Claim 10 was rejected under 35 U.S.C. §103(a) as unpatentable over *Kashitani '183* in view of *Jones*. Applicants respectfully traverse this rejection.

Claim 10 depends from claim 6. By virtue of this dependency, Applicant submits that claim 10 is allowable for at least the same reasons given above with respect to claim 6. In

SON-1532
(80001-1532)

Application No.: 09/283,233

addition, Applicant submits that claim 10 is further distinguished over *Kashitani* '183 and *Jones* by the additional elements recited therein, and particularly with respect to the claimed combination. Applicant respectfully requests, therefore, that the rejection of claim 10 under 35 U.S.C. §103 be withdrawn, and this claim be allowed.

Claim 11 was rejected under 35 U.S.C. §103 as unpatentable over *Kashitani* '183 in view of *Kashitani*, U.S. Patent No. 5,757,518. Applicants respectfully traverse this rejection.

Claim 11 depends from claim 6. By virtue of this dependency, Applicant submits that claim 11 is allowable for at least the same reasons given above with respect to claim 6. In addition, Applicant submits that claim 11 is further distinguished over *Kashitani* '183 and *Kashitani* '518 by the additional elements recited therein, and particularly with respect to the claimed combination. Applicant respectfully requests, therefore, that the rejection of claim 11 under 35 U.S.C. §103 be withdrawn, and this claim be allowed.

Newly Added Claim

Newly added claim 14 recites An image input device including a mirror body which is designed in a polygonal prism form and formed of mirror faces on the side peripheral surfaces thereof to reflect image pickup light from a subject at a mirror face; a linear sensor for taking therein the image pickup light reflected from each mirror face of said mirror body and subjecting the image pickup light thus taken to photoelectric conversion, wherein said mirror body is disposed so that the length direction thereof is substantially parallel to the length direction of said linear sensor, and provided so as to be rotatable around the center of a plane which is substantially perpendicular to the length direction of said mirror body; a housing in which said mirror body and said linear sensor are accommodated, and a slender incidence window for passing the image pickup light therethrough into said housing is formed so that the length direction thereof is substantially parallel to the length direction of said mirror body; and an external interface within the housing through which an image pickup information is transmitted to the outside.

Applicant submits that claim 14 is allowable at least because the applied references fail to disclose, teach, or suggest at least an external interface within the housing through which image pickup information is transmitted to the outside. Therefore, Applicant requests that claim 14 be considered and allowed.

SON-1532
(80001-1532)

Application No.: 09/283,233

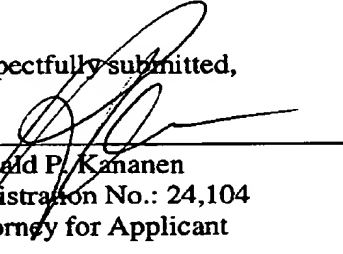
Conclusion

Based on at least the foregoing amendments and remarks, Applicant submits that claims 1, 3-11, 13, and 14 are allowable, and this application is in condition for allowance. Accordingly, Applicant requests favorable reexamination and reconsideration of the application. In the event the Examiner has any comments or suggestions for placing the application in even better form, Applicants request that the Examiner contact the undersigned attorney at the number listed below.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SON-1532 from which the undersigned is authorized to draw.

Dated: January 22, 2004

Respectfully submitted,

By 
Ronald P. Kananen
Registration No.: 24,104
Attorney for Applicant

RADER, FISHMAN & GRAUER, PLLC
Lion Building
1233 20th Street, N.W., Suite 501
Washington, D.C. 20036
Tel: (202) 955-3750
Fax: (202) 955-3751
Customer No. 23353

Amendment In Response To Non-Final Office Action

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, facsimile no. (703) 872-9306, on the date shown below.

Dated: January 22, 2004

Signature:  (Dynese D. Davis)